

1.0 Introduction

The National Environmental Policy Act of 1969 (NEPA) and Council on Environmental Quality (CEQ) implementing regulations (40 CFR 1500-1508) establish procedures that ensure environmental information is available to decision makers, regulatory agencies, and the public before federal actions are implemented. The Western Area Power Administration (Western) is the lead federal agency for preparing the Environmental Assessment (EA) for the Cheyenne-Miracle Mile (CH-MM) and Ault-Cheyenne (AU-CH) Transmission Line Rebuild Project (proposed project). This EA follows the procedures established by the U.S. Department of Energy (DOE) to implement NEPA found at 10 CFR part 1021. Because this project would affect public lands under the jurisdiction of the Bureau of Land Management (BLM), the BLM Rawlins Field Office is a cooperating agency in the NEPA review. BLM is the federal agency responsible for granting rights-of-way (ROW) across public land.

This EA identifies and analyzes the consequences of the proposed project on the human and natural environment and suggests mitigation strategies for adverse impacts. The EA analyzes several alternatives, including the no-action alternative to the proposed project. The EA is not a decision document, but rather an information document, written in plain language to inform the public and decision makers regarding the environmental effects of the proposed project and alternatives. Western will use this EA to decide whether to prepare an Environmental Impact Statement or to issue a Finding of No Significant Impact. Scientific studies used to support this EA are incorporated by reference and summarized in the document.

1.1 Background

Western's Rocky Mountain Customer Service Region proposes to upgrade the existing 146-mile long CH-MM 115-kilovolt (kV) Transmission Line in Carbon, Albany, and Laramie Counties Wyoming; and the existing 35-mile long AU-CH 115-kV transmission line in Laramie County Wyoming and Weld County, Colorado. The CH-MM Transmission Line Rebuild predominantly crosses federal, state, and private lands under the jurisdictions of the BLM, Medicine Bow Divide Resource Area, Rawlins Field Office; Bureau of Reclamation (BOR), Carbon, Albany, and Laramie counties, Wyoming; the Cities of Laramie and Cheyenne, and the State of Wyoming. The proposed rebuild would be located along Western's existing ROWs for the CH-MM 115-kV transmission line. The AU-CH Transmission Line Rebuild predominantly crosses private lands, including lands under the jurisdictions of the City of Cheyenne, Wyoming, Laramie County, Wyoming, and Weld County Colorado; and would similarly follow Western's existing ROW.

Except for six miles of single circuit lattice steel 230-kV construction from Miracle Mile that was constructed in 1992, the CH-MM 115-kV transmission line was constructed in 1939 with predominantly cedar wood H-frame structures and 250 kcmil hollow copper conductor. The line currently has a thermal rating of 109 MVA. The AU-CH 115-kV line was built in the late 1930's, also with predominantly cedar wood H-frame structures and 250 kcmil hollow copper conductor, and currently has a thermal rating of 109 MVA.

Many of the wood H-frame structures used in the original construction of the transmission lines are still in use today, and are approaching, or have exceeded the end of their useful service life. As a consequence, the existing transmission lines are beginning to require increased amounts of maintenance to ensure worker safety and line reliability. The CH-MM line has also been subject to several outages a year. Although most outages are of short durations, these outages affect customers along the line, especially sensitive loads in the Laramie, Wyoming area. Given the age

and condition of the line, the likelihood of an outage causing severe damage to the lines and causing permanent faults is greater, due to lightning or snow and ice loading.

At the present time, all available capacity in the CH-MM line is being used in long-term firm transmission or on a short-term basis. Forty megawatts is reserved for wind generation use, and prospective wind generation customers have made several inquiries for additional line capacity.

The Cheyenne-Rockport 115-kV line section of the AU-CH 115-kV line is an element of the TOT3 operations boundary. The TOT3 operations boundary consists of six line sections along the border between Northeast Colorado and Southeast Wyoming: Sidney-Sterling 115-kV, Cheyenne-Rockport 115-kV, Archer-Ault 230-kV, Sidney-North Yuma 230-kV, Laramie River-Ault 345-kV and Laramie River-Story 345-kV transmission lines. TOT3 is a highly loaded operations boundary, which capacity cannot be increased without improvement of a TOT3 element or improvement of other system facilities that have impact on a TOT3 element.

1.2 Purpose and Need

Western's mission is to market and transmit reliable, cost-based electric power to its customers. This commitment extends to providing quality service at the lowest possible cost. Sound business practice requires Western to maintain its transmission lines and the associated facilities that provide customers with appropriate transmission service and reliability.

The purpose of the CH-MM and AU-CH Transmission Line Rebuild Project is to ensure Western's ability to provide reliable and cost efficient electric power and to provide additional capacity to the highly loaded TOT3 operations boundary.

Western conducted a number of system planning studies from January 2003 through March 2004 to consider various replacement options for these lines. The system studies considered replacements at both 115-kV and 230-kV voltages, using a variety of structure designs. The 230-kV voltage was chosen since a 75 MW benefit to TOT3 would occur if both the CH-MM and AU-CH lines are upgraded to 230-kV.

Public Scoping

Public and regulatory agency involvement in analyzing the proposed transmission line upgrade is important to ensure that relevant environmental impacts are analyzed. Western notified stakeholders of the project and solicited information on their concerns through scoping letters, dated December 9, 2002, and August 18, 2004. The parties contacted included federal, tribal, state and local governments, and other interested organizations and stakeholders (see Appendix D). Western received direct responses from the following agencies: Department of the Army, Corps of Engineers (December 14, 2002), U.S. Fish and Wildlife Service (USFWS)(November 6, 2002), State of Wyoming, Office of Federal Land Policy (January 9, 2003), Wyoming Department of Transportation (December 27, 2002), Wyoming Game and Fish Department (January 7, 2003), Wyoming Department of State Parks and Cultural Resources (December 16, 2002), Wyoming Office of State Lands and Investments (January 7, 2003). Western also consulted with the USFWS in writing and informally. All correspondence from state and federal agencies is available.